

Enrollment No./Seat No.:

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Bachelor of Engineering - SEMESTER - II EXAMINATION - SUMMER 2025**

**Subject Code: BE02000061**

**Date: 19-06-2025**

**Subject Name: Industrial Safety and Standards**

**Time: 10:30 AM TO 01:00 PM**

**Total Marks: 70**

**Instructions**

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

	<b>Marks</b>
<b>Q.1 (a)</b> Define the role of management in safety.	<b>03</b>
<b>(b)</b> Explain fatigue wear.	<b>04</b>
<b>(c)</b> Discuss about the overhauling of electric motor and common troubles involved in it with remedies.	<b>07</b>
<b>Q.2 (a)</b> Explain the role of lubricant.	<b>03</b>
<b>(b)</b> Define Frequency rate, Severity rate, Incidence rate and Activity rate.	<b>04</b>
<b>(c)</b> Describe the structure of hazard identification and risk assessment.	<b>07</b>
<b>OR</b>	
<b>(c)</b> Define fire and explain in details about classification of fire.	<b>07</b>
<b>Q.3 (a)</b> Give a classification of wear.	<b>03</b>
<b>(b)</b> Draw the decision tree for fault tracing in internal combustion engine.	<b>04</b>
<b>(c)</b> List out the types and applications of tools for maintenance.	<b>07</b>
<b>OR</b>	
<b>(a)</b> List the methods for reduction of wear.	<b>03</b>
<b>(b)</b> Draw the decision tree to identify fault in electric motor.	<b>04</b>
<b>(c)</b> Define maintenance and explain different types of maintenance.	<b>07</b>
<b>Q.4 (a)</b> Explain fault tracing.	<b>03</b>
<b>(b)</b> Explain the steps and procedure for periodic & preventive maintenance of pump.	<b>04</b>
<b>(c)</b> Explain in detail about mechanical hazards.	<b>07</b>
<b>OR</b>	
<b>(a)</b> Draw a flow chart of fault-finding sequence.	<b>03</b>
<b>(b)</b> Explain the steps and procedure for periodic & preventive maintenance of air compressor.	<b>04</b>
<b>(c)</b> Explain in details of various causes for Industrial accidents.	<b>07</b>

- Q.5 (a)** Enlist the benefits of overhauling. **03**
- (b)** Explain different types of methods of lubrication. **04**
- (c)** Explain decision tree and draw the steps involved in it with suitable sketch. **07**

**OR**

- (a)** Define periodic maintenance. **03**
- (b)** Explain in detail about Corrosion and its prevention methods. **04**
- (c)** Explain in detail about the fault tracing analysis and its importance. **07**

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